ORM for Maintainers

By Cdr. Dave Bean

Following our first month at sea for a combat deployment, we experienced two very minor crunches in the hangar bay. After considering what had led to those mishaps, I questioned whether we had done enough to cultivate a risk-management mindset in our maintenance department. We had abundant examples of how to apply operational risk management to the art of flying aircraft, but precious little attention had been paid—at least in our command—to the application of the same principles to fixing and maintaining our helicopters.

It occurred to me that if I could leverage the example of these two crunches to establish a practice of discussing risk in our everyday business, we might better develop a risk-management culture across the command.

Our first mishap involved a dented external fuel tank. In the process of moving an empty tank, one of our maintainers let it slip from his grip, causing it to hit a nearby tie-down chain. This minor incident dented the tank and made it unusable. After a closer review, I found the tank had been transported using the oldest, and most traditional Navy method: Sailor power.

Though not heavy, the tank is bulky and difficult to maneuver. Two Sailors hefted the tank with their bare hands because—you're gonna love this—"everybody does it that way." Ironically, a practical solution to mitigating the hazard of the awkward, slippery item lay nearby. A cargo net draped over some support equipment sat next to the broken tank and prompted me to ask if anyone had considered using it, or a like item, to transport our fuel tanks. That method never had been tried, but a brief talk with our mech folks led everyone to see how such a simple device might make the job safer. I soon saw our folks using a pair of ordinary straps to move a tank and knew we were on to something.

The second crunch really focused my attention and offered a tremendous instructional opportunity for our maintainers. A tail strut was being deserviced when the tail pylon clipped an external fuel tank mounted on a nearby Hornet. The helo wasn't damaged, and the FA-18 needed only a cosmetic fix. The ensuing debrief with the deservicing crew showed that all the elements for a successful task were present. The crew had recognized the close proximity of other aircraft, and they knew the deservicing process often led to dramatic and rapid results. They had enough people to monitor the task and to halt it if the situation became too hazardous. That said, the crew failed to recognize and to implement the available controls. I now knew we needed to do more to establish a culture of risk management in our maintenance shops.

One key to the success in our educational efforts would be to target the lessons at the right audience and in the right fashion. Our E-5s and E-6s clearly were in the best position to spread the risk-management philosophy across the command. Each of them already had completed the highly touted ORM University, which gave us a foundation for success. How best to approach them? How could we replicate the flight brief, which brought operational crews together and gave them all a common forum during which ORM could be discussed and applied?

We decided to use the twice-daily, shift-change meetings in maintenance control. It allowed a review of the tasks (identify/assess hazards), senior enlisted leadership (to make risk decisions), and workcenter leadership (to implement controls and supervise). This forum allowed us to leverage existing assets to identify and use, in a creative way, the tremendous assets already on hand.

We now had to find a way to grab and hold the attention of our workcenter leaders. It seemed to me that periodic databurst transmissions to convey immediate hazards, identify the controls available, and allow our E-6s to connect the two would be most effective. We would ask the question, "What's the riskiest thing we're doing this shift?" I encouraged our maintenance senior chief to identify the hazards this way and to be ready with both an answer and a list of controls to mitigate those hazards. These queries—we hoped—would migrate to the supervisors, getting us one step closer to cultivating a healthy ORM mindset.

This system seems to work, but I recognize it as a short-term fix. The dynamics of departmental manning, notoriously short attention spans, and complacency dictate that new and different methods periodically be used to build and foster ORM mindsets.

Cdr. Bean is the commanding officer of HS-6.

The Naval Safety Center is dedicated to reducing mishaps by 50 percent in two years.